

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA  
DOCKET NO. 91-216-E - ORDER NO. 91-1022  
NOVEMBER 18, 1991

IN RE: Application of Duke Power Company                    )  
for an Increase in its Electric Rates                    )  
and Charges.    ) ORDER APPROVING  
RATE INCREASE

On May 17, 1991, Duke Power Company (Duke or the Company) filed an application with the Public Service Commission of South Carolina (the Commission) to adjust and increase its retail electric rates and charges, effective for service in accordance with the terms and conditions of S.C. Code Ann. §58-27-870 (Supp. 1990).<sup>1</sup> According to the Company's application, the proposed rates were designed to increase annual gross revenues from South Carolina retail operations by \$72,542,000 or 7.29% based on the test year, i.e., the twelve (12) months ended December 31, 1990.

The proposed revenue increase was distributed among classes of customers by increasing residential revenues by 9.08%, general service revenues by 7.96%, industrial revenues by 5.96%, and outdoor lighting revenues by 6.18%. The Company stated in its application that "different percentage increases for customer classes are proposed because of the existing disparity in rates of

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1. Pursuant to the provisions of §58-27-860, the Company gave the Commission the statutory 30-day notice of its intention to file an increase in its rates by letter dated April 16, 1991.

return between customer classes." Application, p. 3.

The principal reason for the requested increase set forth in the application is the commercial operation of the Bad Creek Hydroelectric Station, a 1,065 MW facility located in the mountains of western South Carolina. Units 1 and 2 began commercial operation on May 15, 1991. Units 3 and 4 began commercial operation on September 3 and September 13, 1991, respectively.

By letter dated May 30, 1991, the Executive Director of the Commission required the Company to file with the Commission on or before June 24, 1991, and serve on all parties of record, the testimony and exhibits of the witnesses which the Company intended to offer at the hearing in this matter.

By letter of June 11, 1991, the Executive Director of the Commission scheduled a public hearing on September 23, 1991, and required the Company to provide notice of the public hearing by newspaper notices and bill inserts. The Company furnished proof of publication of the required notice on July 19, 1991. Petitions to Intervene were received from Steven W. Hamm, the Consumer Advocate for the State of South Carolina (the Consumer Advocate); the South Carolina Energy Users Committee (SCEUC); the Clifton Power Corporation; and Jasper P. Rogers. These petitions to intervene were allowed by the Commission.

On June 24, 1991, the Company filed with the Commission its prepared direct testimony and exhibits for the following witnesses: William S. Lee, Chairman of the Board and President, Duke Power Company; Roger G. Ibbotson, President of Ibbotson Associates, Inc.;

Richard J. Osborne, Vice President, Finance, Duke Power Company; Donald H. Denton, Jr., Senior Vice President, Planning and Operating, Duke Power Company; W. R. Stimart, Vice President, Rates and Regulatory Affairs, Duke Power Company; Ronald E. White, Senior Vice President, Foster Associates, Inc.; and Thomas S. LaGuardia, President, TLG Engineering, Inc. On September 3, 1991, Duke filed Supplemental Testimony and Supplemental Exhibit 1 of W. R. Stimart. On September 5, 1991, the Company filed amended Exhibit B of the application, Schedule PL, and amended Denton Exhibit 1. Duke filed Supplemental Exhibit 2 of W. R. Stimart on September 20, 1991. During the hearing, Duke filed Supplemental Exhibit 3 of W. R. Stimart.

By letter of August 8, 1991, the Executive Director of the Commission required the Commission Staff and all other parties of record to file their testimony on or before September 9, 1991. The following testimony was filed: for the Consumer Advocate: Paul Chernick, Resource Insight, Inc.; Peter J. Lanzalotta, Whitfield Russell Associates; Philip E. Miller, Riverbend Consulting, Inc.; John B. Legler, Professor of Banking and Finance in the College of Business Administration, University of Georgia; for the Commission Staff: I. Curtis Price, III, Utilities Accountant, A. R. Watts, Chief, Electric Department, and James E. Spearman, Assistant Public Utilities Economist; for the South Carolina Energy Users Committee:

Nicholas Phillips, Jr.<sup>2</sup> The Commission also received a written statement from Jasper P. Rogers on or about September 21, 1991.

On September 16, 1991, Duke filed updated and revised testimony of Roger G. Ibbotson, and the Consumer Advocate filed a revised exhibit of Peter J. Lanzalotta.

On September 11, 1991, in Order No. 91-775, the Commission scheduled a prehearing conference for September 18, 1991, at 10:00 a.m. The prehearing conference was held as scheduled.

The public hearing before the Commission commenced as scheduled on September 23, 1991. William F. Austin, Esquire, Steve C. Griffith, Jr., Esquire, Ellen T. Ruff, Esquire, and Karol P. Mack, Esquire, represented the Company; Steven W. Hamm, Esquire, Raymon E. Lark, Jr., Esquire, Nancy J. Vaughn, Esquire, Carl F. McIntosh, Esquire, and Elliott F. Elam, Esquire, represented the Consumer Advocate; Arthur G. Fusco, Esquire, represented SCEUC; William E. Booth, III, Esquire, represented Clifton Power Corporation; Jasper P. Rogers appeared on his own behalf; and Marsha A. Ward, Esquire, represented the Commission Staff. Two public witnesses, H.D. Stone and J. H. Stone, gave their testimony at the commencement of the hearing. The public hearing was completed on September 26, 1991.

On September 25, 1991, the Company filed the rebuttal testimony of Donald H. Denton, Jr. and William F. Reinke.

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2. Pursuant to their respective requests, the Consumer Advocate and SCEUC were granted an extension of time until September 13 to file their testimony.

Subsequent to the hearing, the Consumer Advocate filed the surrebuttal testimony of Philip E. Miller and Paul Chernick on October 2, 1991.

A night hearing was held in Greenville, South Carolina on October 7, 1991. The Commission heard testimony from the following witnesses: Tom Blank, Jim Schumer, Earl Mills, Joe Jelks, Jim McKittrick, Ron Vankirk, John E. Newman, Robert Keenan, and Kris Risley.

Based on the verified application, the testimony and exhibits received into evidence at the hearing and the entire record of these proceedings, the Commission now makes the following findings of fact:

FINDINGS OF FACT

1. Duke is engaged in the generation, transmission, distribution, and sale of electric energy in the central portion of North Carolina and the western portion of South Carolina, comprising the area in both states known as the Piedmont Carolinas. Application, p. 2.

2. Duke is an electric utility operating in the State of South Carolina where it is engaged in the generation, transmission, distribution, and sale of electricity to the public for compensation. The Company's retail operations in South Carolina are subject to the jurisdiction of this Commission pursuant to S.C. Code Ann. §58-27-10 et. seq. (1976), as amended. The Company's wholesale operations in South Carolina are subject to the jurisdiction of the Federal Energy Regulatory Commission

(hereinafter "FERC"). Application, p. 2.

3. The test period for purposes of this proceeding is the 12-month period ended December 31, 1990, adjusted for certain known and measurable changes. Application, p. 3; Hearing Exhibit No. 36; Hearing Exhibit No. 37.

4. Duke, by its application, sought an increase in its basic rates and charges to its South Carolina retail customers of \$72,542,000. Subsequent to the filing of the application, the Company lowered its request to \$68,384,000. Hearing Exhibit No. 22, Stimart Supplemental Exhibit 3.

5. The summer coincident peak (summer CP) demand allocation methodology is the most appropriate method for making jurisdictional allocations of production cost and for making fully distributed cost allocations among customer classes in this proceeding. Consequently, each Finding of Fact appearing in this Order which deals with the overall level of rate base, revenues, and expenses for South Carolina retail service has been determined based upon the summer CP allocation method.

Duke provides retail service in two states as well as wholesale service to certain municipalities and electric membership cooperatives; therefore, it is necessary to allocate the cost of service among jurisdictions and among customer classes within each jurisdiction. The Company based its application on the use of the summer coincident peak allocation methodology, which was found appropriate by the Commission in its Order in the Company's last rate case, Docket No. 86-188-E. As Company witness Denton

testified, Duke has utilized and the Commission has approved the summer CP method in its cost studies since 1970. Denton also testified that by all forecasts, Duke will continue to be a summer peaking company. (TR. Vol. 2, p. 91).

Commission Staff witness Watts and SCEUC witness Phillips supported the continued use of the summer CP method. SCEUC witness Phillips presented testimony and exhibits demonstrating the dominance of the summer peak demand on the Duke system. Phillips further testified that other methods of cost allocation would not adequately account for the dominant summer coincident peak and would therefore fail to reflect the actual load characteristics of the Duke system. (TR. Vol. 4, p. 112). No witness challenged the appropriateness of the summer CP allocation methodology for Duke.

While the Commission adopts the Summer CP methodology, it must also consider the proposal by Staff witness Watts to eliminate the Minimum System concept in the Company's cost of service study. The Minimum System approach is a method used to separate, as customer related, a certain portion of distribution facilities. Staff recommended that the concept be eliminated so that all portions of affected accounts are allocated by their more appropriate allocation factor. No party put forth any evidence to convince the Commission that the Staff's recommendation should not be adopted. Therefore, the Commission finds that the Minimum System concept should be eliminated from Duke's cost of service study.

6. The appropriate operating revenues for Duke for the test year under present rates and after accounting and pro forma adjustments are \$988,044,000 for service to its South Carolina retail jurisdiction. Support for the Commission's finding concerning the appropriate operating revenues can be found in the testimony and exhibits of witnesses Stimart, Watts, Price and Miller.

The differences between the recommendations of the witnesses are related to adjustments to customer growth and the annualization of revenues to the level of rates reflected in the currently approved South Carolina retail tariffs. Commission Staff witness Watts agreed with the Company's adjustment to annualize revenues to the level of rates reflected in the currently approved South Carolina retail tariffs. However, witness Watts also recommended that the Company's adjustment be modified by \$110,510 to reflect the additional revenue associated with the requested increase in the Company's reconnect fee from \$5.00 to \$15.00. (TR. Vol. 5, p. 229).

The Commission Staff and the Consumer Advocate agreed that as to customer growth, the standard Commission method of accounting for customer growth should be utilized. (TR. Vol. 5, pp. 33-34, 79). The Company proposed a different methodology to calculate customer growth. The Company has provided no justification that persuades the Commission to abandon its traditional method of determining customer growth for ratemaking purposes. Therefore, we find that the traditional method be used and that, in this



proceeding, the customer growth factor is .87%. Hearing Exhibit No. 37, Accounting Exhibit A-2.

7. The appropriate test year operating expenses for Duke Power's retail electric operations after accounting and pro forma adjustments are \$818,569,000. The Company, the Consumer Advocate, and the Staff proposed various adjustments to several of the Company's operating expense accounts. Additionally, there were many areas where there was no disagreement among the parties as to the appropriate accounting and pro forma adjustments to be made. Therefore, this Order will discuss only those accounting and pro forma adjustments where there was a disagreement among the proposals of the parties.

A. DEPRECIATION RATES AND DECOMMISSIONING EXPENSES

The testimony of witnesses Stimart, White, LaGuardia, Watts and Lanzalotta is enlightening in regard to the appropriate level of depreciation and decommissioning expenses.

Duke adjusted depreciation expense to reflect the proposed depreciation rates and nuclear decommissioning expenses. The Company based its proposed depreciation rates on a study prepared by Foster Associates, Inc. which is discussed in the testimony of Company Witness Ronald White. (TR. Vol. 4, pp. 13-29; Hearing Exhibit No. 21). The following table sets forth the Company's current and proposed depreciation rates:

TABLE A

<u>Function</u>	<u>Present</u>	<u>Proposed</u>	<u>Difference</u>
Production			
Steam	3.57%	2.57%	(1.00%)
Nuclear			
Decommissioning	0.67%	1.61%	0.94%
Investment	3.33%	3.09%	(0.24%)
Total Nuclear	4.00%	4.70%	0.70%
Hydraulic	1.50%	1.98%	0.48%
Other	0.00%	0.74%	0.74%
Transmission	3.00%	2.57%	(0.43%)
Distribution	3.40%	3.59%	0.19%
General	5.48%	3.59%	(1.89%)
TOTAL UTILITY	3.68%	3.69%	0.01%

This study also included the annual funding requirements of the nuclear decommissioning amounts based on the site specific decommissioning cost studies included in Mr. LaGuardia's testimony. Commission Staff Witness Watts testified that both the depreciation and decommissioning studies were reviewed by the Commission Staff and were just and reasonable and in line with the studies previously approved by this Commission. (TR. Vol. 5, pp. 249-250).

The Company is proposing site-specific nuclear decommissioning cost studies for each of its seven nuclear units which support the annual revenue needed to fund the Prompt Removal/Dismantling method of decommissioning. This includes removal of non-radiological structures from each site. The studies were performed by TLG Engineering, Inc. and presented by its President, Thomas S. LaGuardia.

The Consumer Advocate took exception to three areas of the study and concomitant funding proposal made by the Company. The first area concerns revenue requirements due to removal of non-

radiological portions of the Company's nuclear plant. The Consumer Advocate concludes that since the Nuclear Regulatory Commission (NRC) does not require such decommissioning nor the associated costs of removal and disposal included as part of the expense, the annual revenue requirements generated from these cost estimates should be removed from the Company's proposal as rate case expenses.

Each Decommissioning Study filed by Mr. LaGuardia contains a section addressing removal of portions of non-radioactive facilities which states in part:

Nuclear power plants are designed to contain the radioactivity inherent in the normal operation of the facility. Accordingly, radioactive and potentially radioactive systems are located in shielded labyrinths, tunnels and pipe chases. This inaccessibility, while essential during operation serves to impede decommissioning activities. Consequently, disposition of these components requires that in many situations that additional access (and working space) be developed. This access is achieved by dismantling structures and components along the intended path of egress and in the immediate working area; material which in most cases is non-radioactive and therefore not normally perceived as a necessary constituent in facility decontamination. Failure to establish adequate working room will increase the residence times for decontamination and dismantling activities resulting in increases in the incurred occupational exposure.

Hearing Exhibit No. 6, Document D03-25-004, p. 73 of 109; Document D03-25-005, p. 73 of 109; Document D03-25-006, p. 88 of 123.

The Company also indicated, in testimony and in its Decommissioning Cost Studies, that removal of the non-radioactive structures from the sites would end Duke's liability, as far as maintenance and site surveillance with its incumbent costs, and permit the return

of these areas for other uses. TR. Vol. 3, pp. 137-138.

Simply because the NRC does not require decommissioning of non-radiological materials does not mean the procedure is not appropriate and that associated expenses will not be incurred. In fact, as Mr. LaGuardia indicated during cross-examination, the NRC did require, in two instances, that the nonradioactive structures of canceled units be completely demolished as part of the termination of the construction permit of those facilities. TR. Vol. 3, p. 139. The NRC is primarily concerned with the safety aspect associated with contaminated or radiated structures in the decommissioning arena. It is necessary to remove portions of these structures to establish adequate room for removal of contaminated materials. As also indicated, without full site restoration there will continue to be expenses for upkeep, surveillance and liability that the Company's ratepayers would be subject to paying. The Commission finds Duke's proposal to dismantle non-contaminated facilities to be appropriate and therefore, denies the Consumer Advocate's proposal to remove the non-radiological decommissioning costs from its annual revenue requirement.

The Consumer Advocate further recommended lowering the 25% contingency factor included in each site-specific decommissioning study to a 10% factor. The Consumer Advocate argues that TLG actually bid on a fixed cost decommissioning project with a 10-15% contingency, that the largest project to date in the United States came in under estimate by almost 10%, and most utilities including Duke are studying life extensions beyond the current license lives.

There have not been any comparable units in complexity or size to those on Duke's system that have gone through the decommissioning process at this point in time to allow a direct analogy of costs and contingencies. Also, the Commission cannot assume there will be additional plant life extensions merely from the fact that it is being studied at this time. The Commission, thus, denies the Consumer Advocate's proposal to lower the contingency factor and the corresponding level of revenue requirement and depreciation rate.

The Consumer Advocate also proposed to adjust the earnings rate assumption for qualified and non-qualified funds to at least 6% and thereby reduce the Company's South Carolina revenue requirement by \$2.869 million and nuclear depreciation to 4.38% on an annual basis. Both the Consumer Advocate and the Company agreed on an annual rate of inflation of 4.5% while the Company assumed an earnings rate of 1% above the 4.5% inflation rate only for money placed in non-qualified, external funds. Consumer Advocate witness Lanzalotta presented information supporting an earnings rate of 1.5% above inflation for the external qualified fund and also used this for non-qualified funds, assuming non-qualified funds should be able to earn a higher rate of interest, relative to inflation, than the qualified fund.

These interest rate assumptions used for funds invested in the qualified and non-qualified external funds are crucial. They have a significant impact on the level of annual funding which is required so that the funds necessary for decommissioning are

available to pay for such decommissioning. The Commission is very concerned about the adequacy of funding for decommissioning as well as appropriate cost allocation. Therefore, the Consumer Advocate's proposal to adjust the assumed earnings and depreciation rates is denied, but his recommendation to review the actual earning rate performance of these funds is reasonable and is therefore approved. The Company is required to reassess its decommissioning provisions every four years in order to consider changes in the estimate of decommissioning costs, including the effect of any life extension allowed by the NRC, and how well the fund has performed.

The Company also offered a new "1990 Depreciation Rate Study" through the testimony of Ronald E. White, Senior Vice President and Senior Consultant of Foster Associates, Inc. The Commission Staff examined this Study and found it to be just and reasonable and in line with previous studies adopted by this Commission. The only exceptions taken to this study were by the Consumer Advocate which stemmed from objections to the Company's decommissioning study which have been addressed previously and were denied. Based upon the Commission's findings concerning the decommissioning study and our review of the depreciation study and the evidence presented, the Commission, finds it to be just and reasonable and appropriate for use in this proceeding and therefore approves the depreciation study as proposed by Duke for use in this case.

B. ANNUALIZATION OF SALARIES AND WAGES

The Consumer Advocate differed from the Company and the Commission Staff on the Company's adjustment to annualize the increases in wage rates and related fringe benefit costs during the test period. The Company proposed an adjustment of \$4,832,000. Witness Price agreed with this adjustment. Hearing Exhibit No. 37, Accounting Exhibit A-1. While witness Miller agreed with the "concept of recognizing wage increases which have occurred during the test year," he opposed the Company's adjustment because of Duke Power's plans to reduce its work force by 3.0% through attrition by the end of 1991. (TR. Vol. 5, pp. 26-28). Witness Miller stated that "since the Company's adjustment only recognizes increases in wage rates and does not recognize the reduction to the employee levels, it significantly overstates the wages that can be expected to be incurred in the future." (TR. Vol. 5, p. 27). However, Mr. Miller could not quantify the level of the impact of the 3.0% reduction in work force. Id., p. 28.

Company witness Lee testified that the 3.0% work force reduction is the Company's expectation in an effort to identify all potential cost savings. He also testified that these efforts will not serve to reduce the Company's cost of service, but will serve to lower the level of increases. (TR. Vol. 1, p. 53).

The Commission finds that the adjustment to annualize salary and wages proposed by the Company and supported by the Commission Staff is consistent with Commission precedent as well as the methodology used by many regulatory jurisdictions. This adjustment

merely recognizes wage increases that have occurred during the test year. This is an appropriate ratemaking methodology. To do otherwise, would be to ignore a fact that has taken place during the test year, that is, wage rates and associated benefits have increased. That is a known and measurable fact. However, the 3.0% work force reduction, while a goal of the Company, is something that is not known and measurable at this point in time. To take into effect Duke Power's work force plan on year-end wage expense and other expense levels, violates the known and measurable concept. The amount of wage increases granted during the test year is known and measurable and will be included in the Company's cost of service and, accordingly, operating expenses will be adjusted by \$4,832,000.

C. ANNUALIZATION OF NON-FUEL O & M EXPENSES

The Company proposed to increase O & M expenses by \$859,000 on a jurisdictional basis in order to annualize O & M expenses other than fuel, purchased power, and wages and benefits based on growth in customers during the test period. Neither the Commission Staff nor the Consumer Advocate proposed such an adjustment. The Company computed an annualization factor of .7834% by taking the increase in end of period customers over the 13 month average number of customers. This factor was then applied to test period O & M expenses, excluding fuel, purchased power, wages and benefits to calculate the adjustment. The Commission Staff did not recommend this adjustment because it is not known and measurable. (TR. Vol. 5, p. 79). The Consumer Advocate witness Miller stated that the



customer growth ratios used by the Company are not known with sufficient specificity to annualize O & M expenses in order to derive expenses which can be expected to be incurred in the future. Thus, the Consumer Advocate was of the opinion that the adjustment failed to meet the known and measurable standard.

Based upon the use of a projected growth rate which the Commission finds not to meet the known and measurable standards, the Company's adjustment to annualize non-fuel O & M expenses should be denied.

#### D. ATTRITION ADJUSTMENT

In its initial filing, the Company proposed an Attrition Adjustment. However, in the supplemental testimony of Witness Stimart, the Company withdrew this adjustment and instead proposed to update O & M expenses for actual wage increases that had occurred since the end of the test year. Hearing Exhibit 22, Stimart Supplemental Exhibit 3-A.

The Staff and the Consumer Advocate opposed the Company's proposed adjustment to update for actual wage increases since the end of the test year. Staff witness Price testified that the salary increases should not be included since they have not been audited. (TR. Vol. 5, p. 88). Consumer Advocate Witness Miller testified that he did not accept any of the Company's updated numbers because the Consumer Advocate had not been presented with work papers in support of these amounts.

The Commission is of the opinion that these costs are not known and measurable. No other party has had the opportunity to

audit these figures presented. The Commission finds that it is inappropriate to allow the unaudited amounts as an increase in the Company's expenses. Therefore, the Company's proposal to increase expenses by \$4,287,000 for after test year wage increases is hereby denied.

Also at the hearing, Mr. Stimart identified an actual increase in NRC fees of \$1,048,000 that the Company had experienced since the end of the test year, December 31, 1990. Staff witness Price recommended the inclusion of the additional NRC fees in cost of service. Staff based its recommendation on its examination of the actual bills from the NRC which were furnished to the Staff and the Consumer Advocate by the Company. (TR. Vol. 4, p. 71; TR. Vol. 5, p. 88). Because the actual bills were available from the NRC concerning the increase in fees, the Commission will accept as a known and measurable expense the additional increase in NRC fees of \$1,048,000.

#### E. RECLASSIFICATION OF VARIOUS EXPENSES

The Commission Staff and the Consumer Advocate proposed various adjustments to certain expense items relating to advertising, dues, and payments to the Edison Electric Institute (EEI) Media Communication Program, as well as dues to various organizations, lobbying expense, and fees to the United States Council on Energy Awareness (USCEA). Specifically, the Commission Staff proposed to reduce employee recreation expense by \$70,000, dues to various organizations of \$99,000, and EEI Media Communication Program payments by \$65,000. The Commission has

traditionally considered that such institutional and promotional advertising should not be ratepayer supported expenses since these are not necessary to provide electric service. Duke included in cost of service dues for EEI and the USCEA. Consumer Advocate witness Miller proposed the elimination of these dues from test year operation and maintenance expenses based upon his belief that these two associations' activities do not provide a direct and primary benefit to ratepayers. (TR. Vol. 5, pp. 38, 34).

The Commission notes that EEI is recognized as a central source of authoritative information on electric energy and provides factual information to congressional committees and regulatory agencies. Mr. Stimart testified that a portion of the EEI dues have already been recorded as a nonelectric expense. According to Mr. Stimart, Duke Power receives an annual letter from EEI advising the Company, based on the annual audit they have done and as a result of negotiations between the NARUC management and EEI as to how their costs should be classified. This annual letter tells the Company how much of the dues should be allocated below the line. (TR. Vol. 4, p. 59). As a result, EEI expenses for lobbying and certain media activities are not accounted for in electric utility operations. The Commission finds that with the Staff's adjustment eliminating \$65,000 from the EEI Media Communication Program, no further reduction should be made to the Company's expenses relating to EEI dues.

According to witness Stimart, the USCEA is a trade association with its main interest being the advancement of and the

communicating to the public a favorable nuclear image. Consumer Advocate Witness Miller recommended that this cost be excluded from test year O & M expenses because it provides no direct and primary benefit to consumers. Mr. Miller noted that the USCEA has as its primary function the promotion of nuclear energy and that this cost should not be the responsibility of the ratepayers. (TR. Vol. 5, p. 44). As further noted by Mr. Stimart, because of Duke's reliance on nuclear generation, its customers have a vital interest in the perceived image and receptiveness of nuclear power throughout the country. The Company is very concerned and very sensitive to what happens throughout the country and throughout the world in terms of nuclear power. (TR. Vol. 4, pp. 82-83). Without further information from the Company as to the benefits of these expenses to the Company's ratepayers, the Commission must disallow this expense since it appears to be akin to public image advertising. Therefore, the Company's test year operation and maintenance expenses should be reduced by \$1,000,000 on a total company basis and by \$260,000 on a jurisdictional basis.

Both the Consumer Advocate and the Staff made proposals to exclude portions of the Company's advertising expenses. Consumer Advocate Witness Miller testified that the advertising expenditures he proposed to exclude fell into three categories: (1) ads which were of a good will or image building nature; (2) ads that are in effect contributions to various organizations and would be more appropriately charged directly to Account 426; and (3) a billing error in the month of December. (TR. Vol. 5, pp. 39-41). The

Staff also reclassified certain advertising expenditures below the line. (TR. Vol. 5, p. 80).

The Company's witness admitted that a number of the costs questioned by both the Consumer Advocate and the Staff are of a philanthropic nature or a "gray" nature, and that they should have been charged below the line. (TR. Vol. 4, pp. 87-89); Hearing Exhibit No. 25.

The Consumer Advocate and the Staff have presented evidence which indicates that the questioned costs do not provide any direct and primary benefit to ratepayers and that they are not necessary in order to provide electric service. The Company presented no evidence to the contrary; nor did it challenge these positions through cross-examination. The Commission finds that the costs questioned by the Consumer Advocate should be eliminated for ratemaking purposes. This should reduce O & M expenses on a jurisdictional basis by \$110,000.

Consumer Advocate witness Miller recommended that 50% of all public affairs department expenses be excluded from test year operating expenses and charged below the line as lobbying. Miller contended that the portion of the expense charged below the line by the Company is not representative of the lobbying-related efforts conducted by employees in the Company's public affairs department. (TR. Vol. 5, pp. 42-43). Duke witness Stimart testified that the Company charges employee wages and expenses to nonelectric or "below the line" while they perform their job with respect to lobbying. (TR. Vol. 4, p. 53). The Company, when the State

legislatures are in session in North and South Carolina, allocates 100% of the directors of South Carolina and North Carolina government affairs as a below the line item. The assumption is made that those individuals spend close to 100% of their time in the respective state capitals when those legislatures are in session. That time, according to witness Stimart, is put in as lobbying. (TR. Vol. 4, p. 54).

The Commission is of the opinion that the Company has adequately allocated and accounted for lobbying expenses by its employees. Additionally, the 50% sharing of these expenses between shareholders and ratepayers recommended by the Consumer Advocate is not based on any actual or proven lobbying time or allocation. The Commission recognizes that some legislation can directly impact electrical utilities ratepayers. The Company's participation in the legislative process can directly benefit its ratepayers, such as the Clean Air Act, for example. The Commission has determined that the Company has properly allocated and accounted for its lobbying expenses and no adjustment or reclassification is necessary in this regard.

F. ADJUSTMENT TO OPERATING SUPPLIES TO END OF PERIOD COST LEVELS

The Company adjusted test period operating expenses, primarily operating materials and supplies, to reflect what it considers to be a continual rise in unit costs which occurred during the test year. This adjustment increased total company test year operating expenses by \$11.2 million and jurisdictional test year operating expenses by \$2,937,000.

Neither the Staff nor the Consumer Advocate recommended that this adjustment be adopted. Consumer Advocate witness Miller testified that the Company determined this adjustment by using the percentage increase of the year-end Consumer Price Index (CPI) before the test period. According to Mr. Miller, this is merely an attrition adjustment and accordingly, it should be rejected because it does not meet the known and measurable standard and because of the Commission's current ratemaking philosophy which mitigates against the effects of unforeseen attrition. Staff also rejected the Company's proposal on the basis that it does not meet the known and measurable standard. (TR. Vol. 5, p. 80).

For the above-stated reasons, the Commission will not accept the Company's adjustment to increase operating supplies to end of period cost levels.

#### G. ANNUALIZATION OF DEMAND SIDE PROGRAMS COSTS

Company Witnesses Lee, Denton, Reinke, and Stimart provided information relating to demand side management (DSM) costs and the DSM Stipulation. Additionally, Consumer Advocate witnesses Chernick, Miller, and Lanzalotta, Commission Staff witness Watts, and SCEUC witness Phillips provided testimony and evidence relating to DSM costs.

Under Docket No. 87-223-E, the Company as well as other parties, including the Consumer Advocate and the Commission Staff, have agreed to comprehensive integrated resource management procedures, including the requirement for utilities to submit integrated resource plans (IRP's) by April 30, 1992, with the

Commission in accordance with the procedures agreed to and approved by the Commission. Company witness Denton testified that the Company has been engaged in least cost planning since 1974 when the Company recognized the need for an alternative to building additional generation. (TR. Vol. 6, p. 124). This planning process became more formalized in recent years and the least cost planning analysis produced a least cost integrated resource plan in 1989, followed by two short term action plans which were submitted to the North Carolina Utilities Commission in 1990 and 1991. Duke will file the results of its current least cost planning cycle with this Commission in April, 1992. (TR. Vol. 6, p. 125). Mr. Denton testified at length in his prefiled testimony and in his rebuttal testimony as to the comprehensive methodology used by Duke to assess the value of demand-side options as part of the least cost planning process. He testified that the purpose of the process is to select the most appropriate least cost alternative to meet future resource requirements. This is done by subjecting demand side programs to a complex analysis, the results of which will be to create a blend of available options that will dependably and reliably meet customers' needs at the lowest reasonable costs. (TR. Vol. 2, pp. 92-93). Witness Denton testified that all of the programs implemented by Duke for which Duke is seeking recovery have been stringently tested to ensure that they are cost effective. (TR. Vol. 6, p. 127). Company witness Reinke offered testimony to show how demand-side programs are evaluated as part of Duke's short term action plan to offset the need for generating



capacity. (TR. Vol. 6, p. 89).

Company witnesses Lee and Denton testified that the Company has accelerated its demand-side expenditures. These increased expenditures are included in cost of service in this case. (TR. Vol. 1, p. 54; Vol. 2, p. 94). Mr. Stimart testified that test year expenses were adjusted to reflect incremental operating expenses for expansion of DSM programs. (TR. Vol. 2, p. 151). Mr. Denton testified that the Company is seeking to recover incremental DSM costs of \$6,475,000 in this case. (TR. Vol. 2, p. 95). Commission Staff witness Watts reflected a similar adjustment in his analysis.

Following the submission of prefiled direct testimony, the Commission Staff, the Company and the Consumer Advocate reached agreement on a Stipulation for recovery in this proceeding of DSM expenditures related to the Company's least cost plan. See, Hearing Exhibit No. 45, Attachment B. The Stipulation provides that the 1990 test year expenditures, including advertising expense, may be recovered as proposed by the Company in this proceeding. This amounted to approximately \$5.6 million. Second, the \$6.475 million of DSM costs for programs listed on page 15 of Mr. Denton's prefiled testimony actually incurred by the Company above the test year level may be booked by the Company into a deferred account. Advertising expenditures for these programs that are reasonable and designed to achieve the goals of the respective programs may also be booked into the deferred account. Further, the Stipulation provided that the Company will credit the deferred

account for found revenues to the extent lost revenues resulting from lost KWH sales due to DSM conservation programs are included in the deferred account. A return on the deferred balance will be computed monthly and added to the balance. The rate of return will equal the net of tax rate of return approved by the Commission in this Docket or subsequent rate cases. The Stipulation also provides that if it is determined that the expenditures were prudent for used and useful DSM programs, the balance in the deferred account will be reflected in the Company's next rate case or appropriate IRP Docket by amortizing the then existing balance over a period of five years, except that the Commission can order a different period if the amount in the deferred account would have a significant impact on rates.

Paragraph 8 of the Stipulation provides that the Commission may consider, based on the record, for inclusion in rates in some manner over and above the 1990 test year costs, the additional DSM cost it finds are actually prudently incurred or prudently committed costs in 1991. These costs will be attributable to the Duke Interruptible Service Program, Standby Generator Program, Water Heater and Air Conditioner Load Control Programs, and associated advertising costs as described in the Stipulation. The additional costs subject to possible inclusion in rates in this case were identified on Appendix 1 to the Stipulation and amounted to \$3,910,814.

Consumer Advocate witness Chernick testified that since the Company has not submitted its integrated resource plan for

regulatory review, it has failed to establish that the plan is truly least cost. Mr. Chernick contends that the Company has provided no basis to evaluate the prudence of its demand-side program expenditures. Therefore, Mr. Chernick recommended that the \$6.475 million should not be recovered in rates in this proceeding until the Company could show the prudence of these costs. If the Company can demonstrate in this proceeding that certain of these expenditures can be prudently committed, then those costs may be approved for recovery through expensing, rate basing, and/or deferrals. For DSM costs that cannot be supported in this case, Mr. Chernick proposed that Duke file for Commission review at a later time. In addition, Mr. Chernick testified that there were a number of features of the Company's DSM programs that were inconsistent with least cost principles, including: (1) the cost effectiveness of certain programs referred to as "load building," (2) the "lost opportunities" due to the way Duke structured its programs, (3) the possibility of cream skimming, and (4) rate design that encourages customers to "take back" their energy savings through increased consumption. (TR. Vol. 5, pp. 82-86).

The Commission has before it the Stipulation agreed to by the Commission Staff, Duke, and the Consumer Advocate. The Stipulation was submitted to the Commission for its approval. No party has objected to approval of the Stipulation. The Commission has carefully reviewed the Stipulation and the testimony of the parties concerning the recovery of DSM costs. The Commission finds that the Stipulation is reasonable and it is hereby approved. The

Commission authorizes the deferral accounting as requested in the Stipulation. The Company shall utilize Account No. 188, Miscellaneous Deferred Debits, for the net deferral. This would include the \$6,475,000 of incremental DSM costs incurred above the 1990 test year level of expenses.

In light of the Commission's approval of the Stipulation and particularly the deferral of the \$6.475 million of incremental DSM expenses, the Commission does not deem it necessary to rule on the prudence of these costs at this time, nor should the Commission make a determination as to the cost effectiveness of the DSM programs of the Company. This will be done when the Company, pursuant to the Commission's directive in Order No. 91-1002, in Docket No. 87-223-E, files for recovery of the costs incurred in implementing its IRP programs. Upon proper filing by the Company, the Commission will review the cost effectiveness and prudence of these programs. The Commission's action herein should in no way suggest that the Commission will either approve or disapprove these expenditures.

The Stipulation additionally provided that the Commission may include in rates additional DSM costs that were presented in Appendix 1 to the Stipulation amounting to \$3,911,000. The Stipulation provided that if the Commission finds that these costs were actually and prudently incurred or prudently committed, then these costs could be included in rates in the instant case. Based on the information provided by the Company through the testimony of witness Denton, the Commission is unable to replicate the \$3.9

million calculation. While Mr. Denton's testimony provides the specified information, that information, when calculated by the Commission does not amount to \$3.9 million. Therefore, the Commission cannot determine that the \$3,911,000 indicated by the Company as being the actual 1991 DSM incremental costs were in fact actually incurred. The Company has failed to meet the requirement of the Stipulation which mandates that the Company show that the \$3,911,000 was actually incurred as well as prudently incurred or committed. That being the case, the Commission has determined that the deferral should be increased by \$3,911,000.

#### H. ANNUALIZATION OF OPERATING COSTS OF BAD CREEK

The Company included depreciation on all four units of Bad Creek in Electric Plant in Service. Commission Staff witness Price recommended that only the Bad Creek balance through August 31, 1991, be included in gross plant because the Commission Staff had not audited the Company's updated numbers. Because of the difference in the plant balance, the Commission Staff and the Company recommended different amounts for depreciation and amortization related to Bad Creek. Consumer Advocate witness Lanzaletta recommended disallowance of operating costs related to Units 3 and 4 as excess capacity, but did not reflect this reduction in any of his exhibits or those of the Consumer Advocate witness Miller. Based on Staff's recommendation, \$67,498,000 of construction work in progress connected with Bad Creek Unit 4, which amounts have been audited by Staff, should be included in gross plant, and that operating costs, depreciation, property

taxes, deferred costs and amortization of deferred costs should be readjusted to reflect the new plant balance.

Reviewing the evidence presented, the Commission is of the opinion that it is more appropriate to adopt Staff's recommendation since those are the numbers that have been audited as part of Staff's investigation. Therefore, depreciation relating to Bad Creek will be adjusted in the amount of \$5,073,000. The Commission Staff and the Company were in agreement as to the annualization of wages, benefits, and materials relating to Bad Creek in the amount of \$433,000 and for amortization in the amount of (\$227,000). The Consumer Advocate did not make a recommendation in regard to those two adjustments. Therefore, the Commission Staff's adjustments will be adopted. The Commission Staff also differed from the Company in the adjustment to taxes relating to the annualization of operating costs relating to Bad Creek. Because of the Commission's adoption of Staff's recommendation concerning the amount of plant in service, the Commission hereby adopts Staff's adjustment to taxes in the amount of \$1,770,000.

Both the Staff and the Company proposed to annualize the amortization of Bad Creek deferred costs. The Commission Staff differs from the Company's recommendation based on a difference in the timing of the amortization and carrying costs on the unamortized amount. The Company proposed a three-year amortization with carrying costs on the unamortized portion during the three-year period. (TR. Vol. 2, p. 51). The Commission Staff recommended a ten-year amortization with the unamortized balance

included in rate base with carrying costs in working capital. The Consumer Advocate did not make a recommendation in this regard.

The Commission finds that the recommendation of the Commission Staff of a ten-year amortization is in keeping with the Commission's policy that the impact of the deferral be minimized to the Company's ratepayers. Additionally, the Company will recover carrying costs on the unamortized balance in rate base. Therefore, the Commission Staff's adjustment achieves a balance between the competing interests of the Company and the ratepayers. The Commission will adopt the Commission Staff's adjustment of \$1,734,000 to depreciation and amortization.

#### I. LOUISIANA ENERGY SERVICES ADJUSTMENT

The Company has included in its total company per book figures \$2,209,000 for the amortization of the Company's investment in Louisiana Energy Services (LES). The Company seeks recovery from South Carolina ratepayers of \$616,000 in this case, which is South Carolina's portion of the amortization. Duke has classified LES expenditures as research and development (R & D). (TR. Vol. 1, p. 63).

LES was formed in 1990 when Claiborne Energy Services, Inc., a Duke subsidiary, entered into a partnership agreement with four other entities. The Company, through its subsidiary, has a 29% interest in the partnership. This partnership has as its objective the building of a privately owned uranium enrichment facility in the United States. Currently, the partnership is developing a uranium enrichment facility in Louisiana.

Company witness Lee testified that the Company's participation in LES was necessary in order for the project to be viable. The project would supply needed competition to the uranium enrichment services market which will lower the price of uranium enrichment services. Mr. Lee testified that the Department of Energy price is high compared to the cost of uranium enrichment services utilizing centrifuge technology such as LES would employ. In addition, Mr. Lee testified that Duke would receive a favorable uranium enrichment services contract if the LES project was successful. Finally, Mr. Lee testified that as a result of the potential competition provided by LES, the Department of Energy had already lowered its uranium enrichment services prices. These lower prices more than offset Duke's total expenditures in connection with LES. (TR. Vol. 1, pp. 63-65).

Commission witness Price recommended that LES costs be removed from the cost of service for South Carolina ratepayers for several reasons, including the almost complete amortization of the LES costs as of the date of the hearing, the fact that the construction and operating licenses were not docketed by the NRC until May 15, 1991, the likelihood of no response from the NRC until late 1991, the uncertainty of the decision to proceed with the project unless reasonable financing is obtained, the possibility of reduced prices from the DOE with competitive pressure, Duke's lack of experience with this technology, and the reduction in investment if Duke sells its interest in LES. (TR. Vol. 5, pp. 85-86).

Consumer Advocate witness Miller recommended that LES costs be



removed from test year operating expenses and set up in a deferred account because of the contingencies surrounding licensing, the decision to proceed with construction, and Duke's plan to sell or redeem its investment at the end of the venture period. (TR. Vol. 5, p. 16).

The Commission agrees with the positions of the Consumer Advocate and the Commission Staff on this matter. While the Company may have accounted for the expenses of the development of this project as an R & D expense, this is not the kind of research and development expense for which the Commission routinely allows the associated expenses to be included in test year operating expenses. For the reasons given by Witnesses Price and Miller, the Commission will disallow this expense and reduce the jurisdictional operating expenses by \$616,000.

#### J. PROPERTY TAXES

The Company annualized test period property taxes on Plant in Service at December 31, 1990. Witness Stimart testified that property taxes for calendar year 1990 were assessed based upon property balances at the end of 1989. Likewise, property taxes for calendar year 1991 will be assessed upon property balances at the end of 1990. This adjustment increases property tax expense in the test period to the year-end level of investment. The Company's calculation was based upon actual historically experienced changes in rates. (TR. Vol. 2, pp. 151-152). Staff witness Price supported the Company's adjustment. Witness Miller supported the concept of annualized property taxes to reflect the taxes related

to property in service at the end of the test year. However, Mr. Miller alleged that the Company's proposed adjustment was not known and measurable because it was an estimate. (TR. Vol. 5, p. 45).

The Commission has determined that the Company's adjustment to annualize property taxes is appropriate. The Commission finds that the adjustment is based on end of year actual plant balances and meets the known and measurable standard. The Commission finds that property taxes should be adjusted by \$2,313,000.

#### K. OFFICERS' SALARY INCREASE

Both the Consumer Advocate and the Staff have recommended that increases granted to officers during the test year be excluded from test year operating expenses. (TR. Vol. 5, pp. 46, 86). It has been the Commission's policy in previous Duke Power proceedings, as well as in other major utility proceedings, to exclude increases in officers' salaries from test year operation and maintenance expenses. The Commission has been presented with no evidence that would persuade us not to do likewise and will thereby order the same. The Company's test year O & M expenses should be reduced by \$180,000 on a jurisdictional basis.

#### L. AMORTIZATION OF CATAWBA COSTS

The Commission Staff included in cost of service the annual amortization of Catawba deferred costs. This results from prior Commission decisions to amortize the reasonable and prudently incurred Catawba deferred cost over a ten-year period. No other evidence was submitted by any other party. Based on the record, the Commission finds that depreciation and amortization should be

adjusted by \$420,000 on a South Carolina jurisdictional basis.

M. IMPLEMENTATION OF SFAS 106

Consumer Advocate witness Miller recommended that Duke defer the costs associated with Statement of Financial Accounting Standards No. 106 (SFAS 106) because its effective date is not until 1993. (TR. Vol. 5, p. 48). Company witness Stimart explained that SFAS 106 requires the Company to accrue, during the years that employees render the necessary service, the expected cost of providing those benefits to employees unlike the pay-as-you-go treatment afforded these benefits in the past. Witness Stimart testified that this Statement was effective in 1990, giving companies some time to obtain the necessary records to adopt this statement as early as possible before the mandatory 1993 date. (TR. Vol. 4, p. 62). The amount of the Company's adjustment is based on the cost determinations reflected in the Company's recently completed actuarial study undertaken to establish compliance with current accounting requirements.

Commission Staff witness Price agreed with the Company's recommendation to recognize SFAS 106 costs in this proceeding, particularly in light of the Company's recent major changes in retirement benefits. According to witness Price, the Company is recognizing the entire post retirement benefit obligation on a discounted cash flow basis for 1992. (TR. Vol. 5, p. 94). As noted by witness Price, the Company is not actually proposing to put the entire amount into cost of service but only about 10%. (TR. Vol. 5, p. 93). Witness Price noted that the Company and the

Commission Staff have known for years that this expense was coming. (TR. Vol. 5, p. 92). Additionally, Mr. Price noted that the Commission has previously approved the adoption of SFAS 106 in Docket No. 90-698-C. (TR. Vol. 5, p. 93).

The Commission has considered the evidence in the record and finds that the adjustment to reflect the implementation of SFAS 106 is a known and measurable expense and that it should be properly included in operating expenses. Therefore, the Commission Staff's adjustment to increase wages, benefits and materials by \$3,830,000 should be approved for ratemaking purposes herein.

#### N. INTEREST ON CUSTOMER DEPOSITS

The Commission Staff proposed to annualize interest on customer deposits, consistent with prior Commission decisions. The Company did not propose an adjustment and the Consumer Advocate did not make a recommendation in this regard. The Commission has determined that consistent with its prior decisions that Staff's adjustment increasing interest on customer deposits by \$6,000 and decreasing income taxes by \$2,000 should be adopted for ratemaking purposes herein.

#### O. EMPLOYEE MOVING EXPENSE

Witness Miller proposed to adjust the test year costs associated with employee moves and relocations to reflect the average employee moving expense incurred over the five-year period from 1986 through 1990, because of fluctuations in moving expenses from year to year. Witness Miller explained, "It is important that any abnormally low or high expenditure be normalized for

ratemaking purposes in order that the test year expenditure will be as representative as possible of the expenses that are anticipated to be incurred during the time the rates will be in effect." (TR. Vol. 5, p. 32). Witness Stimart testified on cross-examination that with the ongoing aggressive assessment of costs, the movement of the Company's work force experienced in 1990 should continue at an even higher rate. He concluded that 1990 costs for employee moving expenses are representative of the upcoming years. (TR. Vol. 4, pp. 81, 82). The Commission Staff concurred with the Company's expense level.

The Commission finds that in this instance where the testimony indicates that the Company's work force is moving and should continue to move, that it would be inappropriate to "normalize" the employee moving expense incurred over a five-year period. The Company's testimony supports the use of the 1990 costs as appropriate for employee moving expenses. The Commission does not accept the Consumer Advocate's adjustment to normalize these moving and relocation expenses. Therefore, no adjustment will be made to employee moving expenses.

P. WRITE OFF OF COLEY CREEK COSTS

The Company proposed amortization over five years of the abandoned Coley Creek costs. The Commission approved the Company's accounting treatment of Coley Creek costs in a letter to Mr. Stimart dated October 29, 1990, reserving further review in this proceeding. Consumer Advocate witness Miller recommended that these costs be amortized over a ten-year period. The Commission

Staff accepted the Company's five-year write off. (TR. Vol. 5, p. 92). Mr. Stimart testified that this Commission has tended to amortize items of this nature over varying periods of time depending on the magnitude of the dollars to be amortized. (TR. Vol. 4, p. 44).

The Commission finds that the accounting treatment previously approved by the Commission should be continued. Based on the magnitude of the dollars to be amortized, the Commission is of the opinion the abandonment costs do not warrant the lengthy deferral recommended by the Consumer Advocate and that the five-year amortization is appropriate in this instance. Therefore, the Commission accepts the five-year amortization of the Coley Creek abandonment costs.

#### Q. STORM DAMAGE COSTS

The Commission approved deferred accounting of storm damage costs incurred in 1989 with a five-year amortization period. The Company experienced two major storms in 1989, the first was a tornado in May and the second was Hurricane Hugo in September. The Company requested and the Commission granted it permission to defer the abnormal costs associated with these storms and to amortize these deferred costs over a five-year period. The amortization began in January, 1990, so the test year reflects a full year's amortization. (TR. Vol. 5, p. 50). Consumer Advocate witness Miller proposed to adjust the annual amortization of deferred storm damage costs by removing 10.2% of the amortization because the deferred costs includes certain labor and associated benefits that

Mr. Miller alleges were already included in base rates. (TR. Vol. 5, pp. 50-51).

The Commission notes that witness Miller incorrectly calculated his adjustment to remove a certain amount of labor by using a jurisdictional allocation factor. The Company's cost of service for South Carolina retail includes storm damage amortization expense on a direct charge basis. Witness Miller acknowledged on cross-examination by the Company that use of a jurisdictional allocation factor is inappropriate when expenses have been directly assigned. (TR. Vol. 5, p. 64).

Therefore, based on the evidence, the Commission has determined that the Company's treatment of storm damage expenses is appropriate and that no further adjustment need be made to those expenses.

#### R. INTEREST SYNCHRONIZATION

The Company, the Commission Staff and the Consumer Advocate proposed to adjust income taxes to reflect interest synchronization. All three proposed different adjustments based on different assumptions made by each of the parties concerning such things as the Company's capital structure, embedded cost of debt, annualized interest on customer deposits, etc. Based on the adjustments and capital structure approved herein, the Commission finds that income taxes should be reduced by \$4,339,000 as proposed by the Commission Staff.

8. Duke Power Company's test year total jurisdictional retail electric operating income for return after accounting and pro forma adjustments and prior to the effect of the proposed increase is \$170,951,000. This calculation is based on operating revenues of \$988,044,000, total operating expenses of \$818,569,000, and customer growth of \$1,476,000. See, Hearing Exhibit No. 37, Accounting Exhibit A and A-2.

9. Duke Power Company's original cost rate base allocated to jurisdictional retail electric operations for the test year, after accounting and pro forma adjustments is \$1,835,128,000. This is based on the following adjustments:

A. PLANT IN SERVICE

The Commission finds that all four units of the Bad Creek Hydroelectric Station were in commercial operation prior to the commencement of the hearing. As testified by Mr. Lee, Bad Creek Units 1 and 2 went into commercial operation on May 15, 1991, and were in operation at the time of the record summer peak. Unit 3 began commercial operation on September 3, 1991, and Unit 4 on September 13, 1991.

Mr. Lee testified that the Bad Creek Hydroelectric Station, a four-unit, 1,065 MW facility, was completed ahead of schedule and under budget. In his prefiled testimony, Mr. Lee testified that Bad Creek would be completed under budget at an approximate cost of \$1.1 billion. (TR. Vol. 1, p. 59). Mr. Lee testified that pumped storage offers special dynamic advantages to the Duke system that no other type of capacity can offer. Without Bad Creek, the



projected reserve margin in 1991 would have been well below the minimum reserve margin of 20%. (TR. Vol. 1, p. 60).

In his summary and update of his testimony given on the stand, Mr. Lee stated that Bad Creek Units 1 and 2 went into commercial operation on May 15, 1991, and were in operation at the time of the record summer peak. If these two units had not been on-line, Duke's summer reserve margin would only have been 15%. Unit 3 began commercial operation on September 3, 1991, and Unit 4 on September 13, 1991. Mr. Lee testified that Bad Creek had been completed ahead of schedule and over \$100 million under budget. He stated that the completed cost of Bad Creek compares favorably to other projects completed in the same time frame. In addition, he testified that the capacity from Bad Creek is necessary to meet the growing demand for reliable electricity in the Duke service area and to maintain adequate reserve margins. (TR. Vol. 1, pp. 66-67). Mr. Stimart, in the summary of his direct testimony, testified that the final cost of Bad Creek was approximately \$1,008,000,000. (TR. Vol. 2, p. 165).

Company witness Reinke also testified that Bad Creek Units 1 and 2 were needed to meet the summer 1991 peak and Units 3 and 4 are needed to keep reserves at the minimum levels in 1992. Duke's reserves are projected to be 20.7% in 1992 and 18.3% in 1993. (TR. Vol. 6, p. 94).

Planning for Bad Creek began in the late 1960's when the Company foresaw the need for pumped-storage capacity to complement the nuclear and base load plants that were being planned and built

by the Company. Mr. Reinke testified that pumped-storage projects such as Bad Creek offer benefits over and above the value of the capacity alone. According to the testimony, pumped storage is a benefit to the Duke system because its load shape can accommodate the technology and there is sufficient nuclear and fossil generation to provide low-cost pumping energy for Bad Creek. (TR. Vol. 6, pp. 90-91). With the addition of Bad Creek, the Duke system will be able to operate more reliably and economically because of the complimentary fit of the pumped-storage generation with the rest of Duke's generation. At a final cost of \$1,008,000,000, Bad Creek compares favorably with other units of its type completed in the same time frame. Exhibit (WFR-1), Hearing Exhibit 44, to Mr. Reinke's testimony, which assumes commercial operation in 1992, reflects this favorable comparison which is further enhanced by the fact that all four Bad Creek units were brought into operation ahead of schedule.

Consumer Advocate witness Lanzalotta was the only witness who raised any issues concerning the prudence of Bad Creek. However, the Consumer Advocate made no recommendation in the form of an adjustment or otherwise concerning the inclusion of Bad Creek into the Company's rate base. Mr. Lanzalotta testified that there are indications that Duke has adequate pumped storage without the addition of Bad Creek. He testified further that his belief was based on his Exhibit (PJL-5), Hearing Exhibit 38, which showed that the generation from Duke's other pumped-storage generating station, Jocassee, dropped by about 50% in 1992 and 1993, the first years of

Bad Creek's operation. (TR. Vol. 5, p. 119).

Company witness Reinke testified in response to this point and stated that the projected reduced output from Jocassee in 1992 and 1993 is the result of two of the Jocassee units being scheduled to be out of service for approximately six months in each year for major maintenance work. Mr. Reinke testified further that the addition of Bad Creek would enhance the opportunity to conduct the maintenance at Jocassee in the most economical way. (TR. Vol. 6, pp. 92-93).

Witness Reinke testified that both the Jocassee and Bad Creek units operated above their projected levels of output in 1991. In addition he testified that the pumped-storage generation for the first 19 days of September 1991 exceeded the total generation for Jocassee in September 1990. (TR. Vol. 6, p. 93). The Commission finds the evidence presented on this point by the Company to be convincing and rejects the position advanced by witness Lanzalotta.

Consumer Advocate witness Lanzalotta also testified that Units 3 and 4 of Bad Creek are not needed to maintain reliable reserves over the three-year period during which Duke expects the rates from this proceeding to be in effect. Mr. Lanzalotta testified that with the addition of Bad Creek Units 3 and 4, Duke's reserves would range from 27.9% to 23.3% during 1991-1993. (TR. Vol. 5, p. 125). This testimony was addressed by Company witness Reinke who showed that Mr. Lanzalotta had erred in the method he used to calculate Duke's reserves. The apparent discrepancy is in how demand-side programming should be treated in calculating reserve margins. Mr.

Reinke testified that the proper method to calculate reserves is to determine the combustion turbine equivalent of demand-side management programs rather than as load, which is how Mr. Lanzalotta made his calculation. Mr. Reinke's testimony sets forth in some detail that where generating capacity is to be deferred or replaced by demand-side programs, it is appropriate to use a generation equivalent model to calculate reserves. Mr. Reinke testified that using this method, Duke's reserves would be 20.7% in 1992 and 18.3% in 1993 after the addition of Units 3 and 4 of Bad Creek. (TR. Vol. 6, pp. 94-96). The Commission is convinced by Duke's evidence and finds that Bad Creek Units 3 and 4 are required to maintain reliable reserves.

Consumer Advocate witness Lanzalotta offered testimony to show that 1,237 MW of combustion turbines would cost less in 1992 than Bad Creek. Mr. Lanzalotta used a bus bar analysis to show that 1,237 MW of CTs would be able to supply the same amount of capacity and energy expected from Bad Creek in 1992 at a total annual cost which is about \$43,000,000 less than Bad Creek is expected to cost. Mr. Lanzalotta's analysis used a 5.8% capacity factor. (TR. Vol. 5, p. 128).

Company witness Reinke testified in rebuttal to this point. Mr. Reinke testified that a bus bar analysis is simply the annual costs, including capital costs, of the plant divided by its annual output. Such an analysis does not take into account the system benefits associated with pumped-storage such as the reduction in spinning reserve requirement and its load following capability.

Mr. Reinke testified further that pumped storage is beneficial to the Duke system because its load shape is such that the pumped-storage generation can be utilized during the day to meet system load, and there are sufficient resources in the form of nuclear and efficient fossil generation to provide low-cost pumping at night and on the weekends. (TR. Vol. 6, pp. 97-98).

Mr. Reinke testified further that Mr. Lanzalotta's use of a 5.8% capacity factor, which does not reflect the impact of the other system benefits of pumped storage in his bus bar analysis, was incorrect. In fact, Bad Creek has operated as high as 33.3% in 1991, and had numerous weeks when the capacity factor has been greater than 15%. Jocassee, Duke's other pumped storage hydroelectric generating station, has operated well in excess of 15% during 1991. A bus bar analysis using a 15% capacity factor rather than a 5.8% capacity factor, would cost \$10 million less annually than combustion turbines. (TR. Vol. 6, p. 98). Similarly, a 27% capacity factor for Bad Creek produces a \$79 million benefit annually over combustion turbines.

The Commission finds that, based on the evidence presented by the Company, Bad Creek provides greater savings to the customer than an equivalent amount of combustion turbines.

Consumer Advocate witness Lanzalotta testified that the cost of Bad Creek was higher than the rates paid to co-generators. (TR. Vol. 5, p. 127). Company witness Reinke testified in response to this point. Mr. Reinke stated that Mr. Lanzalotta's comparison was incorrect because it attempted to compare resources which have

different operating characteristics. Mr. Reinke testified that co-generators and other QF's typically operate around the clock and fluctuate to meet the owner's requirements rather than Duke's system requirements. (TR. Vol. 6, pp. 98-99). Mr. Lanzalotta acknowledged on cross-examination that one of the advantages of Bad Creek is that it will operate when the Company needs it. (TR. Vol. 5, p. 171). The Commission finds that based on the evidence, a cost comparison of Bad Creek with co-generation is inappropriate.

After carefully reviewing all of the evidence presented by the parties, the Commission finds that the construction of Bad Creek was prudent and that it is needed to meet the demand in Duke's service area. The Commission finds further that the costs of constructing the station were prudently incurred and that the selection of hydroelectric pumped-storage generation is prudent compared to other generating alternatives. In addition, the Commission finds that Duke's reserve margins with the Bad Creek units in service will be at levels that are reasonable and necessary for reliable service.

The Consumer Advocate has criticized certain other aspects of Bad Creek. The Commission has reviewed this testimony and exhibits carefully. The remaining criticism, while not specifically addressed, must be rejected by the Commission as not being supported by the facts in evidence.

Initially, the Company in its application sought to include in plant in service \$275,391,000 as an adjustment for Bad Creek. The Commission Staff proposed that plant in service be adjusted by

\$238,765,000, representing three units that were in operation at the time of Staff's audit. Once it became known that all four units of Bad Creek were in commercial operation, the Commission Staff supplemented its testimony and proposed that \$17,640,000 of construction work in progress connected with Bad Creek Unit 4 be included in Gross Plant. That was the amount of dollars associated with the new unit that had been audited by the Commission Staff. Staff further recommended other adjustments in relation to the addition of Unit 4 to plant in service.

The Commission has determined that Staff's adjustment to include a total of \$256,281,000 as an adjustment to plant in service to represent all four units of Bad Creek Hydro Electric Station being in commercial operation is appropriate. That amount has been verified by the Commission Staff and should be adopted and included in rate base. Additionally, the adjustments to depreciation, property taxes, deferred cost and amortization of deferred costs should be readjusted to reflect the new plant balance.

#### B. ACCUMULATED DEPRECIATION

The Staff and the Company proposed to adjust accumulated depreciation. The Commission has previously determined that the adjustment to electric plant in service for Bad Creek as proposed by the Commission Staff is appropriate. Therefore, the adjustments proposed by the Consumer Advocate and the Company regarding accumulated depreciation associated with their respective proposed levels of investment in Bad Creek are inappropriate. Staff

adjusted accumulated depreciation by the amount of the adjustment to depreciation expense for the Company's proposed depreciation rates. The Commission has previously found the Company's proposed depreciation rates to be appropriate for use in this proceeding. Therefore, Staff's adjustment to accumulated depreciation of \$7,903,000 is appropriate for the purposes of this proceeding. Accumulated depreciation will be adjusted accordingly.

#### C. WORKING CAPITAL

The Company, the Staff and the Consumer Advocate filed testimony concerning the working capital computation. All three parties computed the cash allowance component by application of the one-eighth formula traditionally used by the Commission. This one-eighth formula was applied to operation and maintenance expenses exclusive of purchased power and nuclear fuel expense. This amount is then reduced by the average tax accrued balance. No party contested this component of working capital, the average tax accruals or prepayments. The Commission finds, therefore, that the amounts proposed by the Company, Staff and the Consumer Advocate for operating funds, taxes accrued, and prepayments are appropriate for use in this proceeding. However, the parties did disagree on certain other adjustments to working capital.

Instead of including the required bank balances associated with compensating balance requirements for the lines of credit in banks which require that a compensating balance be maintained in the account or penalty charges will be incurred, for working funds which are required in order to conduct day-to-day operations and



miscellaneous special deposits, the Company has simply included its end-of-period cash balance held in each account. (TR. Vol. 4, pp. 66-69; Hearing Exhibit No. 30). The Commission agrees with the Consumer Advocate's recommendation that the minimum bank balances should be limited to the compensating bank balances that are required in order to eliminate fees and to meet the day-to-day cash requirements, and not on all cash held in the bank at the discretion of the Company. The record shows that of the total company cash held in banks amounting to \$8,209,000, only \$508,500 is required as compensating bank balances. This amount, when added to the working funds of \$2,071,000 and the miscellaneous special deposits of \$111,000 generates a total minimum bank balance of \$2,691,000 and a jurisdictional balance of \$700,000. (Hearing Exhibit 36, Schedule PEM2.2). The Commission hereby adopts the recommendation of the Consumer Advocate and will adjust required bank balances by \$700,000.

The Company has included a total company allowance for a bond reacquisition premium of \$42,237,000. This amounts to \$10,906,000 after allocation to the South Carolina jurisdiction. These amounts, though, relate to both electric and nonelectric operations, with the nonelectric operations amounting to 3.0%. The Company does not dispute the 3.0% portion associated with nonelectric operations. (TR. Vol. 4, pp. 64-66). The Commission is of the opinion that the shareholders are not entitled to earn a return on operations that are not associated with the increase in electric rates and, therefore, we agree with the Consumer Advocate

that the working capital allowance should be reduced by the amount which reflects the portion associated with nonelectric operations. Therefore, the adjustment for bond reacquisition premiums should be in the amount of \$10,579,000 on a South Carolina jurisdictional basis.

The Company has included miscellaneous deferred debits and credits of \$9,844,000 in working capital. Consumer Advocate witness Miller made an adjustment to exclude this component of working capital from rate base. Commission Staff witness Price did not include miscellaneous deferred debits and credits as a per book item of working capital.

In support of his adjustment, Mr. Miller testified that such items are more appropriate for inclusion in a lead-lag study. Moreover, Mr. Miller noted that deferred debits and credits are not an item that this Commission regularly includes in working capital. (TR. Vol. 5, p. 12).

The Commission has considered the positions of the various parties and finds that no adjustment should be made to miscellaneous deferred debits and credits. In the Commission's opinion, the Company has provided no basis as to why the Commission should include the various items making up miscellaneous deferred debits and credits in working capital. Therefore, the Commission finds that no adjustment should be made to miscellaneous deferred debits and credits and that the Company's proposal is denied.

Consumer Advocate witness Miller testified that unclaimed funds represent amounts which have never been claimed by the

contributors, i.e., a customer deposit which is never returned by the Company could eventually become an unclaimed fund. In addition, since these unclaimed funds are a non-investor source of funds, they should be subtracted from rate base in the same manner that other non-investor sources of funds are subtracted. (TR. Vol. 5, p. 52).

The Commission agrees with the adjustment proposed by the Consumer Advocate. As Mr. Miller indicated in his testimony, this recommendation is consistent with the Commission's previous orders ruling on this matter. Duke Power has presented no reason as to why the Commission should treat unclaimed funds in a different manner. The Company's jurisdictional rate base should be reduced by \$214,000.

The Commission Staff proposed to increase rate base by \$15,607,000 relating to Bad Creek deferred costs. This proposal is based on the Staff's recommendation previously adopted by the Commission that the deferred cost be amortized over ten years and that the unamortized balance be included in rate base. (TR. Vol. 5, p. 81). The Commission, having already determined that the Staff recommendation of a ten-year amortization with the unamortized balance included in rate base as being appropriate, finds that Staff's adjustment to increase rate base is appropriate and is adopted for ratemaking purposes herein. Therefore, rate base will be adjusted by \$15,607,000 on a jurisdictional basis.

Commission Staff witness Price has included \$1,841,000 of unamortized Catawba deferred cost in working capital. This

adjustment corresponds to his proposal to reflect the Catawba deferred amortization costs in the cost of service. (TR. Vol. 5, p. 86; Hearing Exhibit No. 37, Accounting Exhibit A-3). Based on the Commission's prior discussion concerning Bad Creek deferred costs, the Commission hereby adopts this adjustment.

D. MISCELLANEOUS ADJUSTMENTS

All other adjustments proposed by Staff and not objected to by any party are hereby adopted. All other adjustments proposed by the various parties not specifically addressed herein have been considered by the Commission and have been denied. General taxes, state income taxes, and federal income taxes will be adjusted to reflect all adjustments approved herein by the Commission.

E. TOTAL RATE BASE

The Commission, having determined the appropriate adjustments to the Company's rate base herein sets forth the appropriate balances for the various categories of rate base:

TOTAL RATE BASE

Gross Plant in Service	\$3,384,892,000
Less: Accumulated Depreciation	(\$1,357,607,000)
Net Plant	<u>\$2,027,285,000</u>
Materials and Supplies	\$ 73,668,000
Cash Working Capital	\$ 63,475,000
Plant Held for Future Use	\$ 4,402,000
Construction Work in Progress	\$ -0-
Accumulated Deferred Income Taxes	(\$ 315,569,000)
Operating Reserves	(\$ 14,180,000)
Customer Deposits	(\$ 3,953,000)
TOTAL ORIGINAL COST RATE BASE	<u>\$1,835,128,000</u>

10. The appropriate capital structure for the Company for use in this proceeding is as follows:

<u>ITEM</u>	<u>PERCENT</u>
Long-Term Debt	40.69%
Preferred Stock	9.31%
Common Equity	<u>50.00%</u>
TOTAL	<u>100.00%</u>

(Hearing Exhibit No. 37, Accounting Exhibit A-4).

In its Application, the Company utilized its actual per book capital structure as of December 31, 1990, consisting of 49.82% common equity, 9.68% preferred stock, and 40.50% long term debt. The Consumer Advocate concurred in the capital structure proposed by the Company. However, in keeping with its current practice, the Commission Staff updated the capital structure as of June 30, 1991. (Hearing Exhibit No. 37, Accounting Exhibit A-4).

The Commission finds that it is appropriate to use the updated capital structure of June 30, 1991, as proposed by Staff. This gives the Commission the most updated financial picture of the Company for use in determining rate base and setting rates. The Commission will continue to monitor the capital structure of Duke Power.

11. The testimony and exhibits of Company witnesses Lee, Osborne, and Ibbotson, Commission Staff witness Price, and Consumer Advocate witness Legler presented the Commission testimony concerning the appropriate embedded cost rates for long term debt and preferred stock. The Commission finds that the appropriate

embedded cost rate for long term debt is 8.67% and preferred stock is 7.53%. (Hearing Exhibit No. 37, Accounting Exhibits A-5 and A-6). These reflect an update to June 30, 1991.

Upon review of the evidence, the Commission finds that the embedded cost rates as of June 30, 1991, as proposed by the Commission Staff, which are in accordance with the updated capital structure as of June 30, 1991, are appropriate for use herein.

12. The reasonable range of return on common equity that Duke should be allowed an opportunity to earn is 12.0% to 12.5% which the Commission adopts for this proceeding. The Commission will set rates based on a rate of return at the midpoint of the range of 12.25%. Combined with the debt and preferred cost rates and the capital structure set forth in the table below which the Commission finds reasonable, the overall rate of return is 10.35%:

<u>ITEM</u>	<u>PERCENT</u>	<u>COST</u>	<u>WEIGHTED RATE</u>
Long-Term Debt	40.69%	8.67%	3.53%
Preferred Stock	9.31%	7.53%	.70%
Common Equity	<u>50.00%</u>	12.25%	<u>6.12%</u>
TOTAL	100.00%		10.35%

The evidence for this finding concerning the appropriate return on common equity is found in the testimony and exhibits of Company witness Ibbotson, Commission Staff witness Spearman, and Consumer Advocate witness Legler. A principal issue in any ratemaking determination involves the proper earnings to be allowed on the common equity investment of the regulated utility. In this proceeding, the Commission heard the expert testimony of three

witnesses relating to the fair and reasonable rate of return on common equity for the Company.

This Commission has frequently stated that it adheres to no particular theory or methodology for the determination of a fair rate of return on common equity. (See, e.g., Order No. 85-841, at p. 56). Rather, we perceive our function as that of engaging in a careful and reasoned analysis of the evidence in a practical context. The record of the instant proceeding illustrates the use of several fundamental methods for the determination of the cost of equity capital by the expert witnesses for the Company, the Consumer Advocate, and the Commission Staff. Those methods include the discounted cash flow ("DCF") method, the capital asset pricing model ("CAPM"), the risk premium method, and the comparable earnings approach.

The evidence presented by the witnesses demonstrated an approach to their respective investigations within the parameters of the language of the United States Supreme Court in its decision in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944), at 603:

[T]he return to the equity owner should be commensurate with the return on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

While the independent studies of each witness, either implicitly or explicitly, commenced with those standards, the respective methods employed produced quite different results, presenting the

Commission with recommendations ranging from 11.5% to 13.17%. The Commission must weigh the opinions of the expert financial witnesses as to the expectations of investors or the opportunity costs of equity capital in conjunction with the tangible facts of the entire record of the proceeding, including the observable financial condition of the Company. Southern Bell Telephone & Telegraph Co. v. Public Service Commission of South Carolina, 270 S.C. 590, 244 S.E.2d 278 at 282 (1978). In the final analysis, we must determine the credibility and probative value of the testimony of the expert financial witnesses and use our judgment to evaluate this evidence in regard to the cost of common equity.

Furthermore, the Commission cannot determine the fair and reasonable return on common equity for the Company in isolation. Rather, the Commission must carefully consider a variety of relevant factors, including identifiable trends in the market relating to the costs of labor, materials, capital, interest rates and inflation rates; comparisons of past earnings with present earnings and prospective earnings; the prices for which the Company's service must be rendered; the returns of other enterprises and the reasonable opportunities for investment therein; the financial policy and capital structure of the Company and its ability to attract capital; the demonstrable competency and efficiency of the Company's management; the inherent protection against destructive competition afforded the Company through the operation of the regulatory process and the competitive forces that are coming into being have never been experienced before; general



economic conditions; and the public demand for growth and expansion which is required to evaluate the construction program for the foreseeable future. The Commission must strike the balance among these complex and interrelated factors in the context of the record herein.

In its determination of a fair and reasonable rate of return, the Commission maintains the ultimate responsibility of setting the rates to be charged for the utility services provided by the Company. The exercise of that responsibility involves the balancing of the interests of the consumer and the investor. The Commission must gravely balance the interests of the same consumer in regard to the reliability and adequacy of the supply of energy. The Commission has maintained these interests paramount throughout this proceeding. The Commission's determinations of the Company's revenue requirements and of the proper allocation of those revenues within the approved rate structure embodied in this Order reflect fairly and equitably the interests expressed in the record before us.

Duke presented Dr. Roger G. Ibbotson, the Consumer Advocate presented Dr. John B. Legler, and the Commission Staff presented Dr. James E. Spearman to testify on the rate of return to be applied to Duke's common equity. Dr. Ibbotson's testimony was filed on June 24, 1991, and was prepared in February of 1991 and used data current at that time. Dr. Ibbotson updated his prefiled testimony in September 1991 and used data current at that time to reflect changes in the capital market which had occurred after

preparation of his testimony. Dr. Spearman's testimony was filed on September 9, 1991, and was based on data current as of that date. Dr. Legler's testimony was filed on September 9, 1991, and used data current as of that date. Dr. Legler updated his testimony on September 25, 1991, and used current data as of that date.

A summary of the respective recommended returns on common equity, as updated, is as follows:

<u>PARTY</u>	<u>WITNESS</u>	<u>METHOD</u>	<u>RETURN ON COMMON EQUITY</u>
Company	Dr. Ibbotson	CAPM	13.17%
Staff	Dr. Spearman	CAPM/DCF	12.0% to 12.5%
Consumer Advocate	Dr. Legler	DCF/CAPM	11.5% to 12.5%

The Company's witness, Dr. Ibbotson, recommended in his prefiled testimony a return on common equity of 13.75%. Prior to the hearing, Dr. Ibbotson updated his recommended return on common equity to 13.17% because of changes in market conditions occurring between the time he prepared his testimony and the time of the hearing. (TR. Vol. 3, p. 35).

Dr. Ibbotson estimated Duke's cost of equity relying exclusively on the CAPM which defines the cost of equity to be equal to the sum of the rate of return on a riskless security plus an equity risk premium, which is an additional return for the risk of holding the particular security (in this case Duke Power's common stock). The risk premium is estimated by multiplying the beta (a measure of risk) of Duke's common stock by the additional return which an investor expects to realize by investing in a diversified market portfolio rather than in the riskless security.

(TR. Vol. 3, p. 12). For the riskless security, Dr. Ibbotson used an average of recent yields on 20-year U.S. Treasury bonds. For his estimate of the expected equity risk premium of the market as a whole, Dr. Ibbotson used 7.1%, which was developed in Ibbotson Associates' Stocks, Bonds, Bills and Inflation 1991 Yearbook, and is the arithmetic average of the differences, or spreads, between the annual total returns on the stock market (represented by the S&P 500), and the average annual income returns on 20-year treasury bonds, over the period 1926 through 1990. (TR. Vol. 3, p. 25). Using a risk-free rate of 8.55%, a beta for Duke of 0.65 and a market risk premium of 7.1%, Dr. Ibbotson concluded that the current required rate of return on equity for Duke Power Company is 13.17%, which includes no allowance for flotation costs. (TR. Vol. 3, pp. 26, 31 & 32).

The Commission Staff's witness, Dr. Spearman, used two independent methods--the CAPM and the DCF--in arriving at his estimates of the cost of capital. Based upon these two methods, he recommended a rate of return on common equity in the range of 12.0% to 12.5%. (TR. Vol. 5, p. 295). In his DCF analysis, Dr. Spearman utilized data for Duke Power Company and the Moody's Electric Utility Index to derive the expected cost of equity. Dr. Spearman's DCF analysis which included several variations resulted in an expected cost of common equity of 10.34% to 12.01%. (TR. Vol. 5, pp. 275).

Dr. Spearman's prefiled testimony indicated a rate of return in the range of 10.59% to 12.50% based on his analysis of the CAPM

method. (TR. Vol. 5, p. 293). Dr. Spearman concluded that because the investor could reasonably expect that market returns in the future will probably be consistent with past performance and the beta will probably be at the upper end of the beta range in this study, his recommendation was in the range of 12.0% to 12.5%. (TR. Vol. 5, p. 295).

The Consumer Advocate's witness, Dr. Legler, primarily used the DCF methodology, but also employed the risk premium, CAPM and comparable earnings methodologies. Based on data for Duke Power Company and a group of double-A rated electric utilities, Dr. Legler arrived at a range of cost of equity capital for Duke Power Company using the DCF method of 10.7% to 12.0% in his updated testimony. Dr. Legler's updated risk premium method produced a rate of return range of 10.5% to 11.5%. His updated CAPM method indicated a range of 10.3% to 12.5%. In his updated testimony, Dr. Legler's range was 11.5% to 12.5%, with his final recommended rate of return on equity capital being 12.00%. (TR. Vol. 6, pp. 48-53).

The Commission has been presented with differing testimony and evidence with respect to the cost of common equity. As that is the case, it is therefore our responsibility to weigh and evaluate such evidence and reach a decision after applying our expertise and reasoned judgment. The Commission observes that there are a number of valid approaches to the cost of equity determination, but that, in the final analysis, the results of all these approaches are influenced by the judgments and assumptions of the witnesses. In this case, judgment plays a critical role, for the disparity

between the recommendations of the witnesses in their use of the DCF method is not attributable to any fundamental difference in methodology, but rather to legitimate differences of opinion as to which data provides the best evidence of the cost of equity. This Commission must ultimately use its own judgment in evaluating the evidence presented by the witnesses.

It therefore becomes the Commission's responsibility to set a fair and reasonable rate of return on common equity from which can be derived the lawful rates for the Company for its South Carolina retail electric operations. This responsibility must be discharged in accordance with statutory and judicial standards, based upon the numerous factors identified herein, and applied in accordance with the informed judgment of the Commission.

In evaluating the evidence presented, the Commission makes note of witness Legler's statement, to wit:

It is my opinion that the application of finance theory can provide help and guidance in the decision process, but that the issue of the fair rate of return is still largely judgmental. This is particularly true with respect to the return on equity component of the overall rate of return. Each finance theory suffers from the necessity of making crucial assumptions requiring judgment in the process of its application. Although proponents of any particular theory tend to minimize or even overlook the importance of the necessary assumptions, often the assumptions that are necessarily made are crucial to their results. (TR. Vol. 6, pp. 3-4).

An examination of Duke's witness Ibbotson's study reveals that he used only one financial model, the Capital Asset Pricing Model, to develop a cost of equity capital recommendation. While this

methodology has long been accepted by this Commission, Dr. Ibbotson used no other analysis or methodology as a "check" of the reasonableness of his risk premium analysis. Besides a lack of a verification of his CAPM conclusion, witness Ibbotson used only one company, Duke Power, in his analysis. Therefore, the Commission is led to determine that the support for his recommendation is incomplete. The better evidence is supplied by Legler and Spearman.

Both witnesses Legler and Spearman used other proxies in addition to Duke, to assist in estimating the cost of equity. In his risk premium analysis, Dr. Legler used a group of double-A rated electrics, and tested his estimated return for Duke against the average estimated return for this set of reasonably comparable companies. He further tested the comparability of Duke's riskiness compared to the riskiness of this group of companies. He used commonly used measures of risk recognized by this Commission in making these tests. For comparative purposes, Dr. Spearman applied both his DCF and CAPM analyses to Moody's Electric Utility Index, comprised of twenty-four companies.

Although this Commission has found the CAPM an acceptable method of estimating the cost of equity, this Commission recognizes that it, like the other methods, suffers from the necessity of making judgments in its application and from basic assumptions which underlie the model. Some of these problems were discussed by Dr. Legler. (TR. Vol. 6, pp. 35-39). Indeed, while Dr. Ibbotson found the cost of equity using this method to be 13.17%, Dr.

Legler, using input variables the Commission finds to be acceptable to those used by Dr. Ibbotson, found the cost of equity to be in a range from 10.3% to 12.5%. Dr. Spearman also found a range using the CAPM, and his range was from 10.59% to 12.50%, reasonably close to the range found by Dr. Legler.

Because he failed to use another methodology to verify the results he obtained through the CAPM, and failed to provide any comparative analyses, the Commission finds that Dr. Ibbotson's recommendation should be given little weight in the determination of the appropriate cost of equity. Instead, the Commission will rely more heavily upon the studies conducted by Drs. Spearman and Legler.

Based on the information presented within the context of this rate proceeding, specifically the rate of return studies of Drs. Spearman and Legler, the Commission finds that the return on common equity is from 12.0% to 12.5%. The Commission further finds that a fair and proper return on common equity of 12.25% provides the opportunity to produce additional annual revenues of \$30,251,000 for the Company's South Carolina retail electric operations, which the Commission finds fair and reasonable.

The Commission considers the range of return of 12.0% to 12.5% to represent the reasonable expectations for the equity owner, and therefore, consistent with the standards of the Hope decision. The range of return found fair and reasonable is sufficient to protect the financial integrity of the Company, to preserve the property of the investor, and to permit the Company to

continue to provide reliable service to present and future customers at reasonable rates. Additionally, this range coincides with the recommendations of Drs. Legler and Spearman.

An important function of ratemaking is the determination of the overall rate of return which the utility should be granted. This Commission has utilized the following definition of "rate of return" in previous decisions, and continues to do so in this proceeding:

For regulatory purposes, the rate of return is the amount of money earned by a regulated company, over and above operating costs, expressed as a percentage of the rate base. In other words, the rate of return includes interest on long-term debt, dividends on preferred stock, the earnings on common stock and surplus. As Garfield and Lovejoy have put it "the return is that money earned from operations which is available for distribution among the various classes of contributors of money capital. In the case of common stockholders, part of their share may be retained as surplus."

Phillips, The Economics of Regulation, pp. 260-261 (1969).

The amount of revenue permitted to be earned by the Company through its rate structure depends upon the rate base and the allowed rate of return on the rate base. As discussed in the preceding section of this Order, the primary issue between the regulated utility and regulatory body most frequently involves the determination of a reasonable return on common equity, since the other components of the overall rate of return, i.e., dividends on preferred stock and cost of debt, are fixed. Although the determination of the return on common equity provides a necessary component from which the rate of return on rate base can be



derived, the overall rate of return, as set by this Commission, must be fair and reasonable.

The United States Supreme Court's landmark decision in Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia, 262 U.S. 679 (1923), delineated general guidelines for determining the fair rate of return in utility regulation. In the Bluefield decision, the Court stated:

What annual rate will constitute just compensation depends upon many circumstances and must be determined by the exercise of a fair and enlightened judgment, having regard to all relevant facts. A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risk and uncertainties; but it has no constitutional rights to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time, and become too high or too low by changes affecting opportunities for investment, the money market, and business generally.

262 U.S. at 692-693.

During the subsequent year, the Supreme Court refined its appraisal of regulatory precepts. In its frequently cited Hope decision, supra, the Court restated its view:

We held in Federal Power Commission v. Natural Gas Pipeline Co....that the Commission was not bound to the use of any single formula or combination of formulae in determining its rates. Its ratemaking function, moreover involves the making of 'pragmatic adjustments' (citation omitted)...Under the statutory standard of 'just and reasonable' it is the result reached, not the

method employed which is controlling (citation omitted).... The ratemaking process under the Act, i.e., the fixing of 'just and reasonable' rates involves a balancing of the investor and the consumer interests. Thus we stated in the Natural Gas Pipeline Co. case, that regulation does not insure that the business shall produce net revenues. (citations omitted) But such considerations aside, the investor interest has a legitimate concern with the financial integrity of the company whose rates are being regulated. From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock. (citation omitted.) By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

320 U.S. at 602-603.

The vitality of these decisions has not been eroded, as indicated by the language of the more recent decision of the Supreme Court in IN RE: Permian Basin Area Rate Cases, 390 U.S. 747 (1968). This Commission has consistently operated within the guidelines set forth in the Hope decision. See, also, Southern Bell, supra, 244 S.E. 2d at 280-3.

The rate of return which the Commission has herein found to be fair and reasonable should enable the Company to maintain and enhance its position in the capital markets. Patently, however, the Company must insure that its operating and maintenance expenses remain at the lowest level consistent with reliable service and exercise appropriate managerial efficiency in all phases of its operations. The Commission has consistently manifested its abiding

concern for the establishment and continuation of efficiency programs on the part of its jurisdictional entities. By its Directive of August 27, 1974, the Commission urged the derivation of cost control studies, the adoption of cost reduction programs, and the elimination and reduction of costs "in all possible ways." The continued awareness of the potential efficacy of such programs and their implementation is consistent with the conscious national and State policies to limit the deleterious effects of inflation.

Company witness Lee described the considerable effort made by the Company to reduce its costs of construction and its operations and maintenance expenses. (TR. Vol. 1, pp. 53, 54, 68-69) (TR. Vol. 2, pp. 11-18) The Company's construction policies and programs have resulted in favorable comparisons with the construction costs of other electric utilities. In addition, the standards for the measurement of economical generating operations manifest that the Company has generally demonstrated an ability to produce electrical energy in a measurably efficient manner.

The record of this proceeding indicates that the Company has generally undertaken its cost reduction efforts in the spirit of the Commission's Directive and consistent with our previous Orders, especially the Order in Duke's last rate case in 1986. Since that time Duke has eliminated more than 1,200 work positions and is on a program to eliminate about 600 positions per year over the next three years mainly through attrition. (TR. Vol. 1, pp. 50-51, 53). The Commission feels that Duke is serious about cost savings. Nonetheless, the Commission cannot ignore the effect of the

Company's increasing operating expenses. The Company and the parties before us may take notice of the fact that the Commission is not inclined to be completely satisfied with the cost reduction and efficiency programs of any jurisdictional utility. The Commission will continue to expect the Company to design and implement such programs in the future as an index of good management practice in the interests of its customers and of the Company itself. With the full array of its resources at its disposal, the Company should be able to assure us that such programs produce identifiable and measurable results consistent with the provision of economical and adequate service to the Company's ratepayers. The Commission has found a fair and reasonable return on common equity which the Company should be allowed the opportunity to earn, and has herein set rates to produce revenues to reach that return. The Commission considers that effective programs of cost reductions can operate to enable the Company to improve its financial posture and earn the return approved. In addition to the review of the Company's cost of service in the context of this proceeding and our express expectations of efficient and effective management, the Commission considers the accepted regulatory devices of the use of a year-end rate base, adjustments for customer growth and annualized depreciation, together with adjustments for identifiable and measurable changes in revenues and expenses to combine to represent a reasonable regulatory approach to the earnings erosion attributable to inflation.

The Commission has found that the capitalization ratios as of June 30, 1991, are appropriate and should be used in the instant proceeding. The Commission has likewise found that the respective embedded cost rates for long-term debt of 8.67% and for preferred stock and preference stock of 7.53%, should be utilized in the determination of a fair overall rate of return. For the purpose of this proceeding, the Commission has herein found the proper cost rate for the Company's common equity capital to be 12.25%.

13. Based upon the foregoing, Duke should increase its annual level of gross revenues under present rates by \$30,251,000. The annual revenue requirement approved herein is \$1,018,295,000 which will allow Duke a reasonable opportunity to earn the rate of return on its rate base which the Commission has found just and reasonable.

The evidence supporting this finding of fact is contained in the testimony and exhibits of Company witness Denton, Staff witness Watts, Consumer Advocate witness Lanzalotta and SCEUC witness Phillips. Mr. Denton described the changes Duke proposes for the Company's various rate schedules. The Company proposes to consolidate its three non-time-of-use residential rates into two new rate schedules: (1) RS, residential service; and (2) RE, residential service, electric water heating and space conditioning. Both rates include conservation discounts. These proposed rate schedules eliminate present rate Schedules R, RC, and RA and reassign customers to new Schedules RS and RE. Schedule RS consists of four categories. Category 1 applies to any residential

customer. Category 2 applies to residential customers with qualifying electric water heaters. Category 3 applies to residential customers meeting certain thermal conditioning requirements. Category 4 applies to residential customers meeting both the requirements for Categories 2 and 3. Schedule RE applies to residential customers where all energy required for water heating, cooking, clothes drying, and space conditioning is supplied electrically. This schedule consists of two categories. Category 1 applies to customers meeting specific requirements for electric water heaters and electric space conditioning. Category 2 applies to customers meeting Category 1 specifications, as well as the same specific thermal conditioning requirements as those required by Schedule RS, Category 3 and 4. Mr. Denton explained that the new schedules place customers in more homogeneous groups based on the equipment installed in their homes and permits targeted price signals to these homogenous groups.

As a result of the proposed residential rate design charges, some customers on each rate schedule will receive bill increases greater than the percentage increase for the residential class. Duke proposes to create Schedule RB for these customers who would otherwise receive an increase of 5% or more above the average residential class increase, and limit the magnitude of the increase to Schedule RB customers to 5% above the average residential increase. Duke also plans to encourage customers who will receive an increase greater than the increase for the class to move to time-of-use Schedule RT, which may minimize the impact of the

proposed increase. The Company proposes to modify Schedule RT by reducing the customer charge and including eight weekday holidays as off-peak periods.

Mr. Denton also explained the proposed modifications to general service and industrial rate schedules. Duke proposes to modify Schedules G, GA, and I to eliminate the confusion caused by GA being available to both general service and industrial customers. Under the current rate design, it is sometimes difficult for customers to determine the appropriate rate for their usage. Duke proposes that industrial customers be served on Schedule I, and that general service customers be served on Schedules G and GA. The billing demand provision of Schedule GA currently applied to industrial customers would be maintained for Schedule GA customers moving to Schedule I. For general service customers, Duke proposes to retain Schedules G and GA with certain modifications. Under each rate, the price during April through November will be the same. The months of December through March will have lower energy charges for Schedule GA. These changes will reduce customer confusion in the general service class over which rate is more advantageous. Bills under Schedule GA will always be equal to or lower than bills under Schedule G.

The Company proposes to reduce the Schedule OPT summer on-peak hours from ten to eight, with the on-peak period beginning at 1:00 p.m. and ending at 9:00 p.m. The reduction is proposed to make it easier for customers to shift production off-peak by allowing them to operate two eight-hour shifts during the off-peak period. SCEUC

witness Phillips agrees with the proposed change, in on-peak hours. (TR. Vol. 4, p. 125). No other party expressed opposition to the modified hours. Therefore, the Commission concludes that the modified summer on-peak hours on Schedule OPT proposed by the Company should be adopted.

The Company proposes to increase closed rate schedules GB, GT, and IT 2% more than the overall general increase to encourage customers to move from these rates to open rate schedules. This proposal was opposed by SCEUC witness Phillips, who proposes that Schedule OPT be revised by lowering demand and energy charges to make it more attractive to Schedule I and IT customers, rather than simply increasing the rate to move customers. Mr. Phillips also proposes that the increase for Schedule GB, GT, IT, and I be limited to the average of the industrial class increase. (TR. Vol. 4, pp. 126-127). This position, however, is inconsistent with the Company's cost of service study.

Mr. Denton also described the proposed changes to lighting schedules. Duke currently has four lighting schedules, Schedules T, T2, T2X, and FL. Schedule T, Street Lighting Service, is available to governments for public lighting. Duke proposes to change the name to Schedule PL, Street and Public Lighting Service. Schedule T2, Outdoor Lighting Service, would be designated Schedule OL. The designation of Schedule FL, Floodlighting Service, would not change.

Duke is proposing additional pricing levels for Schedules OL and FL to cause new customers to pay the higher cost of installing



lights when a pole installation is requested by the customer. The proposed rates include pricing for a new luminaire on an existing pole, for the installation of a new pole, and a price for a new pole installation and underground service. Existing installations would be served on the luminaire-only rate. Schedule T2X, Subdivision Entrance Lighting Service, is currently available for lighting entrances to subdivisions and other public areas. Duke is proposing to cancel Schedule T2X and offer new mercury vapor and high pressure sodium vapor post-top luminaries on Schedule OL.

The Company proposes to increase the noncompliance penalties for Interruptible Rider IS. This is the service rider under which General Service and Industrial Service customers receive credit from the Company to reduce their usage at Duke's request. Under this proposal, each time the customer fails to reduce usage, approximately one third of the credits paid to the customer during the year are to be repaid to Duke. If the customer fails three times during the year to reduce usage upon request, all of the credits paid during the prior twelve months will be repaid to Duke, and the customer will be removed from Rider IS. Staff witness Watts was of the opinion that this proposal was consistent with customer expectations on this Rider. TR. Vol. 5, p. 227.

The SCEUC proposes the credit to Interruptible Rider IS be increased to 50% of actual demand costs, or \$7.50/KW. Presently, the credit is \$3.50/KW. The Commission finds that this request should be denied. The Company provided information which indicates it is attracting a sufficient amount of interruptible load at the

present credit and has requested an increase in the system cap to 1100 megawatts.

Finally, Duke proposes that a pilot program named "Limited Demand Charge Days" (LDCD) be approved. The pilot program will be used to determine to what extent industrial customers will change their consumption characteristics during times of adequate supply by limiting demand charges during these periods. Customers would be able to increase their consumption during these periods without incurring an increased billing demand.

Staff witness Watts testified that the Electric Department reviewed Duke's rates, tariffs and service regulations, and verified the requested increase by rate schedule. Based on the Staff's review and audit, it concurs with the Company's proposed rate design changes. (TR. Vol. 5, pp. 223-228).

Consumer Advocate witness Lanzalotta testified that the increase in Schedule RS should be no larger than the increase for the residential class, and that the proposed tailblock rate in Schedule RE should not be less than the tailblock rate in Schedule RS. This proposal would eliminate the discount for efficient air conditioning and high levels of insulation. Mr. Lanzalotta testified that Duke's residential rate design improperly encourages the use of electric space heating, water heating, and air conditioning. Mr. Lanzalotta is correct when he asserts that Duke's rate design will encourage electric heating and water heating. Duke has encouraged efficient heat pumps on its system to create off-peak winter sales. Such sales improve Duke's load

factor, which enables fixed costs to be spread over a larger number of kilowatthours. This benefits all customers by lowering the unit cost of electricity. (TR. Vol. 4, pp. 106-107; 110-111). Mr. Lanzalotta's recommendations are inconsistent with Duke's efforts that are clearly beneficial to Duke's customers. Duke is a summer peaking utility, with a significant air conditioning load. The discount in Schedule RE which Mr. Lanzalotta criticizes will encourage efficient air conditioning and conservation. These are appropriate goals of rate design which the Commission has adopted in prior cases and finds that such are appropriate in this proceeding.

The Company proposes to increase the reconnect charge for electric service from \$5.00 to \$15.00. Cost analysis validate that the expenses involved in these operations are above the proposed level. Accordingly, the proposed reconnect fee should be approved.

An increase in the late payment charge from 1.0% to 1.5% is proposed by the Company. Staff witness Watts noted that the Commission's Regulation R.103-339(3) allows a utility to charge a 1.5% maximum late payment charge. Commission approval is not necessary to implement the request. However, as Staff recommended, the Commission will require the Company to inform its customers before implementing the increased charge.

The Company is proposing to include a basic facilities charge (BFC) of \$1.40 for schedule WC, residential submetered water heating. Presently, there is no BC for that schedule. The Commission finds that the proposed BFC of \$1.40 is appropriate for

schedule WC.

The Company proposes to increase the BFC to almost all of its rate schedules. The BFC for Schedules RT and GA were reduced. The Commission hereby approves the proposed reduction in the BFC to Schedules RT and GA. However, the Commission denies the proposed increase in the BFC to all other rate schedules.

The parties have made other proposed revisions to the rate schedules proposed by Duke which are not specifically addressed in this Order. The Commission has carefully considered the testimony and exhibits of each party. The remaining proposals, while not specifically addressed, must be rejected by the Commission. Duke's proposed rate design, rate schedules, miscellaneous charges, and terms and conditions should be approved, except as specifically modified in this Order.

14. The rate of return for the Industrial class is outside the "band of reasonableness," a band or range of plus or minus 10% of the average retail rate of return. Consequently, the revenue increase approved herein should be distributed in order to move the Industrial class rate of return toward the band of reasonableness. In his direct testimony, Mr. Denton explained that different percentage increases were applied to customer classes to help move the Residential and Industrial classes toward the band of reasonableness. Mr. Denton testified that the industrial class is experiencing a significantly higher rate of return than average, and the residential class is experiencing a significantly lower return than average. Duke proposes to allocate the increase in

revenue to trend toward equal rates of return.

SCEUC witness Phillips testified that Duke's proposed allocation of the revenue increase does not adequately move class rates of return toward equality. Under Mr. Phillips proposal, the remaining difference would be reduced in future rate cases. Mr. Phillips proposed as an alternative that the Commission utilize the difference between Dukes's requested increase and the actual increase granted to reduce or eliminate overpayments made by the industrial class. TR. Vol. 4, pp. 121-122.

Staff witness Watts recommended adoption of the Company's Cost of Service Studies with certain modifications. TR. Vol. 5, p. 238.

The Commission concludes for purposes of this proceeding that the revenue increase approved herein should be allocated in the same manner as proposed by the Company in an effort to bring the Industrial class return toward the band of reasonableness.

Commission Staff witness Watts recommended removal of franchise fees/municipal license fees as part of the Cost of Service Study, listed in General Taxes as Revenue Related Taxes. (TR. Vol. 5, p. 235). Mr. Watts cited the Commission's decision in City of Spartanburg v. Public Service Commission of South Carolina, 281 S.C. 223, 314 S.E.2d 599 (1984) as support for his recommendation. These fees, imposed by certain municipalities, would only be charged to those customers living within the corporate limits of that municipality, therefore not affecting all ratepayers.

For purposes of the rates adopted in this Order, the

Commission finds that the franchise fees/municipal license fees are to be included in base rates. The Company shall remove these fees beginning in January, 1992. The Commission requires the Company to give notice to all customers concerning the removal of these fees from the cost of service. After this notice period, the Commission finds it appropriate to reduce base rates for removal of franchise fees/municipal license fees and include these fees as a separate line component on affected customers' bills effective with the first billing cycle in January, 1992.

In Mr. Stimart's supplemental testimony, he recommended an adjustment to test period revenues to reflect the anticipated billings to be received under FERC Rate Schedule J between Duke Power Company and Carolina Power & Light Company. (TR. Vol. 2, pp. 159-160). This adjustment would have decreased test period costs by \$11,487,906. (Hearing Exhibit 4, Stimart Supplemental Exhibit 1, p. 2). Mr. Lee testified on the stand, however, that Duke had received notice from Carolina Power & Light Company that it did not intend to comply with the provisions of Schedule J. He also testified that litigation could well result. (TR. Vol. 1, p. 73). Based upon these events, Mr. Lee and Mr. Stimart recommended that no adjustment be made to the test period as a result of Schedule J due to the uncertainties involved in that contract. (TR. Vol. 1, p. 74; TR. Vol. 2, p. 160). Mr. Stimart proposed that any collections received pursuant to Schedule J be placed in a deferred account and that when the uncertainty surrounding the contract is resolved, the Company submit a proposal to adjust rates to reflect the

collections in the deferred account and to reflect future collections under Schedule J in rates. (TR. Vol. 2, p. 160).

The Commission concludes that it would be inappropriate to include any amounts in Schedule J in rates adopted in this proceeding. The Commission orders the Company to place any collections received pursuant to Schedule J in a deferred account. The Commission reserves the right to address the deferral, if necessary.

15. As an evidentiary matter, the Company and the Consumer Advocate sought to introduce certain exhibits. Specifically, the Consumer Advocate objected to the introduction of Hearing Exhibit Nos. 19 and 42. The Company objected to the introduction of Hearing Exhibit No. 43. The Commission has reviewed the record concerning the introduction of these documents/articles and finds that they should not be introduced into the evidence of this proceeding as none have been properly authenticated.

16. The Commission finds that it is not the proper forum to determine Duke's responsibility or liability in controlling the level of its Catawba River system, specifically the water levels of Lake Wateree. Mr. Jasper Rogers intervened in this proceeding and testified during the hearing. Mr. Rogers asked the Commission to make the Company be more responsible for its actions concerning the flood levels of Lake Wateree. As Mr. Rogers pointed out, the deeds of the property owners around the Lake reserve a ten foot standing easement from the top of the Lake Wateree dam to the Company.

The Company's Catawba River system provides hydroelectric

power through several generating units along the system. The requirements to run the Company's hydroelectric system are governed by the Federal Energy Regulatory Commission. Therefore, this Commission is without jurisdiction to direct the Company to construct a floodgate or spillway to control the Wateree lake level. As Company witness Lee stated, the Company has established a toll-free number for property owners to call to get information on the lake level conditions. Mr. Lee testified that lots were sold with notice to the buyers that the lot was subject to flooding. TR. Vol. 1, p. 76-77. While the Commission is sensitive to the situation of Mr. Rogers and other similarly situated property owners, the Commission is not the agency to resolve the problem.

#### CONCLUSIONS OF LAW

1. That Duke Power Company is an electric utility providing service to the public for compensation in South Carolina.

2. That under S.C. Code Ann. §58-27-10 et seq. (1976) as amended, Duke's retail operations in South Carolina are subject to the jurisdiction of this Commission.

3. That the accounting adjustments approved herein are just and reasonable and appropriate for ratemaking purposes.

4. That the Company's total original cost rate base amounts to \$1,835,128,000 and is a just and reasonable level.

5. That the capital structure and embedded cost rates approved herein are appropriate for use in this ratemaking proceeding.



6. That the reasonable range of return on common equity is 12.00% to 12.50% and is fair and reasonable. The rates approved herein will be set on the mid-point of the range, or 12.25%.

7. That the overall rate of return on rate base is 10.35%.

8. That the Company will have the opportunity to produce additional annual revenues of \$30,251,000 based on a rate of return on equity of 12.25%. The annual total revenue requirement is \$1,018,295,000.

9. That the Company's proposed rate design, rate schedules, miscellaneous charges, and terms and conditions are approved, except as specifically modified in this Order.

10. That franchise fees/municipal license fees be removed as a part of the cost of service study. The Company, before removing these fees, shall notify all affected customers living within the corporate limits of the municipality imposing the fee. The Company will begin including these fees as a separate line item of a customer's bill effective with the first billing cycle in January, 1992.

11. That the Commission is not the proper forum to remedy the problems put forth by Mr. Jasper Rogers.

12. That the rates approved herein shall be effective for service rendered on and after the date of this Order.

13. That the Company should continue to file quarterly reports showing:

- (a) Rate of return on approved rate base;
- (b) Return on common equity (allocated to South Carolina

retail electric operations);

(c) Earnings per share of common stock;

(d) Debt coverage ratio of earnings to fixed charges.

These reports should be filed within 45 days of the end of the calendar quarter.

14. That the Company shall file for approval within five (5) days of this Order, revised rate schedules to reflect the Commission's determinations herein.

IT IS THEREFORE ORDERED:


1. That the revenue requirement proposed by Duke Power Company is unreasonable and improper and is hereby denied.

2. That the Company shall file with the Commission for approval within five (5) days of the date of this Order, rate schedules reflecting the findings and conclusions herein.

3. That the Company file the reports identified herein in accordance with our findings and conclusions.

4. That this Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

  
Chairman

ATTEST:

  
Executive Director

(SEAL)